



Opportunities for ENERGY STAR in Affordable Housing

EPA's Local Climate and Energy Program
Webcast on Integrating Energy Efficiency
Into Affordable Housing
April 21, 2009



Why is Energy Efficiency Important for Low Income Families?



- Energy costs were 4.6% of household income in 2001 for middle-income families
- In the same year, the average low-income household spent 19.5% of their annual income on energy



Key Affordable Housing Administrators



- Housing and Urban Development (HUD)
 - CDBG, HOME, HOPE VI, Section 202/811
- US Dept. of Agriculture (USDA)
 - Rents, rehab, home purchase for rural housing
- Federal Housing Finance Board (FHFB)
 - Affordable Housing Program provides targeted grants and interest rate subsidies to developers
- State Housing Finance Agencies (HFA)
 - Fed. Budget authority for tax credits and tax-exempt bonds
- Other state and Local Governments
 - 3,200 local housing authorities managing public housing



How EPA is Promoting ENERGY STAR for Affordable Housing



- Working with HUD to promote ENERGY STAR in grant programs for new and existing housing (HOPE VI, HOME, CDBG, etc.)
- Working with state housing finance agencies to adopt ENERGY STAR measures in criteria used to allocate low income housing tax credits
- Forming alliances with stakeholders to leverage their contacts (Habitat for Humanity, Local Initiatives Support Corporation (LISC))
- Developing and distributing case studies and success stories to local housing authorities through HUD channels and the Web
- Promoting energy efficiency financing (ENERGY STAR Mortgage Pilot)
- Providing Recognition - ENERGY STAR awards for affordable housing



ENERGY STAR for Homes



Individual Energy Efficiency Measures:

- Over 60 product categories including appliances, HVAC, home envelope, windows, lighting

Whole-House Solutions:

- ENERGY STAR Qualified Homes –
 - Homes independently verified to meet stringent energy efficiency guidelines established by U.S. EPA
 - 15-20% more energy efficient than standard new home
 - Includes features such as effective insulation, high-performance windows, efficient HVAC, lighting, appliances
 - Indoor Air Package addresses mold, radon, pest management, combustion safety
 - 1-3 story homes (possibly up to five stories), includes manufactured and modular homes
- Home Performance with ENERGY STAR –
 - Whole-house approach to improving existing homes
 - Uses specially-trained network of contractors and consultants for evaluation and retrofit work



ENERGY STAR Mortgage Pilot Program



- Based on findings of a report showing a need to provide energy efficiency financing to households that don't qualify for Weatherization funding but cannot access market-rate sources of financing improvements
- Lenders offer a real financial benefit to borrowers (i.e., interest rate discount, closing cost discount)
- Home must be ENERGY STAR qualified or must achieve 20% energy savings via Home Performance with ENERGY STAR program or a Weatherization Assistance Program
- Looks to bundle other local energy efficiency grant and incentive programs to benefit borrowers
- Launched in Maine and Colorado. Moving to MA, NJ, NY, PA, DC



ENERGY STAR Tools



- Portfolio Manager (<https://www.energystar.gov/istar/pmpam/#>): Benchmark energy and water consumption for multifamily housing
- Bulk Purchasing Tool (www.quantityquotes.net): Negotiate volume discounts for ENERGY STAR products (light bulbs and fixtures, refrigerators, clothes and dish washers, dehumidifiers, room A/C)
- Home Energy Yardstick (www.energystar.gov/yardstick) – Compare your home’s energy use to other homes using utility bill data
- Other Resources – www.energystar.gov/homes Click on “Affordable Housing”



Examples of ENERGY STAR in Affordable Housing



- 40 state HFAs currently include ENERGY STAR measures in their tax credit allocation plans. Six HFAs require ENERGY STAR qualified homes (DE, MO, NJ, NV, UT, WA)
- Over 6,200 HUD-funded ENERGY STAR qualified homes on 2008, a 55% increase over 2007
- HUD's SHOP (Self-Help Homeownership Opp. Program) grant program now requires new construction to be ENERGY STAR
- Enterprise Green Communities exploring 3rd party verification for ENERGY STAR label

Local Govt. Example: City of Topeka



- Won 09 ENERGY STAR Award
- Comprehensive approach – build ENERGY STAR homes, conduct public outreach and education, provide contractor education
- Require all housing funded by Department of Housing and Neighborhood Development to be ENERGY STAR qualified. HUD HOME funding is applied.
- Conducted comparability study looking at utility costs of ENERGY STAR and non-ENERGY STAR homes. Found that ENERGY STAR homes use 57% less electricity and save 45% on electricity bills



Local Govt. Example: City of Topeka



	Energy Star Units	Non-Energy Star Units	Savings from Energy Star
Electric utility data for 16 months of operation (types A and B combined)			
Total Electricity Usage	11,866 kWh	27,620 kWh	15,754 kWh
Total Electricity Cost	\$ 1,183.28	\$ 2,162.46	\$ 979.18
1 Year Electric Cost Per Unit Type			
Unit Type A	\$ 455	\$ 829	\$ 374
Unit Type B	\$ 347	\$ 827	\$ 480



Local Govt. Example: Philadelphia Housing Authority



- Won a 2007 ENERGY STAR Award
- In 2005 launched an ENERGY STAR Homes demonstration project for low income housing
- 64 townhome units, each ENERGY STAR labeled – the first built by any public housing authority in the state
- Third-party rater provided plan review, computer modeling, blower door and duct leakage testing, and training of PHA staff and project team
- Worked with HUD to add energy efficiency while adhering to total development cost allowance limits.
- Average household utility bill savings of \$524/year (15-20% savings)
- PHA has another 1,560 units in the pipeline targeted for completion over the next 6 years



ENERGY STAR's Main Message



For More Information:

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